

**AMENDMENTS TO THE CLAIMS**

Please amend the claims as shown directly below. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for producing gas from a subterranean formation containing comprising a coal seam, the method comprising the steps of:

drilling at least one substantially vertical well bore into the subterranean formation, which intersects the coal seam[[,]]; and

fracturing the coal seam using a hydrajetting tool at a pressure less than a fracture pressure of the subterranean formation to produce at least one pair of opposed bi-wing fractures formed by erosion of the subterranean formation substantially along a plane of maximum stress, wherein the fracturing minimizes the creation of near-well-bore stresses, and

~~performing an additional fracturing subsequent to the step of fracturing the coal seam using the hydrajetting tool.~~

2. (Original) The method of claim 1, further comprising the step of casing the at least one substantially vertical well bore.

3. (Original) The method of claim 2, further comprising the step of perforating the casing with the hydrajetting tool.

4. (Previously Presented) The method of claim 1, further comprising the step of removing water from the coal seam of the subterranean formation.

5. (Original) The method of claim 1, further comprising the step of inserting logging equipment into the at least one substantially vertical well bore.

6. (Original) The method of claim 1, wherein during the fracturing step the hydrajetting tool produces a plurality of pairs of opposed bi-wing fractures.

7. (Cancelled)

8. (Currently Amended) A method for producing gas from a subterranean formation containing comprising a coal seam, the method comprising the steps of:

drilling at least one substantially vertical well bore into the subterranean formation, which intersects the coal seam[[,]]; and

fracturing the coal seam along the substantially vertical well bore using a hydrajetting tool at a pressure less than a fracture pressure of the subterranean formation to produce at least one pair of opposed bi-wing fractures formed by erosion of the subterranean

formation substantially along a plane of maximum stress, wherein the fracturing minimizes the creation of near-well-bore stresses; ;

drilling at least one substantially horizontal well bore into the coal seam[[],]; and  
fracturing the coal seam along the substantially horizontal well bore using a the hydrajetting tool at a pressure less than the fracture pressure of the subterranean formation to produce at least one pair of opposed bi-wing fractures formed by erosion of the subterranean formation, wherein the fracturing minimizes the creation of near-well-bore stresses, and  
performing an additional fracturing subsequent to the step of fracturing the coal  
seam using the hydrajetting tool along the horizontal well bore.

9. (Currently Amended) The method of claim 8, further comprising the step of casing the at least one substantially vertical well bore and the at least one substantially horizontal well bore.

10. (Original) The method of claim 9, further comprising the step of perforating the casing with the hydrajetting tool.

11. (Previously Presented) The method of claim 8, further comprising the step of removing water from the coal seam of the subterranean formation.

12. (Original) The method of claim 8, further comprising the step of inserting logging equipment into the at least one substantially vertical well bore.

13. (Original) The method of claim 8, wherein during the fracturing steps the hydrajetting tool produces a plurality of pairs of opposed bi-wing fractures.

14. (Cancelled)

15. (Currently Amended) A method for producing gas from a subterranean formation containing comprising a coal seam, the method comprising the steps of:

drilling at least one substantially vertical well bore intersecting the coal seam[[],];  
logging the subterranean formation by inserting logging equipment into the at least one substantially vertical well bore[[],];  
casing the at least one substantially vertical well bore[[],]; and  
fracturing the coal seam along the substantially vertical well bore using a hydrajetting tool at a pressure less than a fracture pressure of the subterranean formation to produce at least one pair of opposed bi-wing fractures formed by erosion of the subterranean formation substantially along a plane of maximum stress, wherein the creation of near-well-bore stresses is minimized, and

performing an additional fracturing subsequent to the step of fracturing the coal seam using the hydrajetting tool.

16. (Original) The method of claim 15, further comprising the step of perforating the casing with the hydrajetting tool.

17. (Previously Presented) The method of claim 15, further comprising the step of removing water from the coal seam of the subterranean formation.

18. (Original) The method of claim 15, wherein during the fracturing step the hydrajetting tool produces a plurality of pairs of opposed bi-wing fractures.

19. (Cancelled)

20. (Currently Amended) A method for producing gas from a subterranean formation containing comprising a coal seam, the method comprising the steps of:

drilling at least one substantially vertical well bore intersecting the coal seam[[],];

logging the subterranean formation by inserting logging equipment into the at least one substantially vertical well bore[[],];

casing the at least one substantially vertical well bore[[],];

drilling a plurality of substantially horizontal well bores disposed substantially within the coal seam and exiting from the at least one substantially vertical well bore, wherein the plurality of substantially horizontal well bores is spaced to maximize interference between the substantially horizontal well bores[[],];

casing the plurality of substantially horizontal well bores[[],];

fracturing the coal seam along the substantially vertical well bore using a hydrajetting tool at a pressure less than a fracture pressure of the subterranean formation to produce at least one pair of opposed bi-wing fractures formed by erosion of the subterranean formation substantially along a plane of maximum stress, wherein the creation of near-well-bore stresses is minimized; and

fracturing the coal seam along the plurality of substantially horizontal well bores using a the hydrajetting tool at a pressure less than the fracture pressure of the subterranean formation to produce a plurality of fractures formed by erosion of the subterranean formation, wherein the plurality of fractures is spaced to maximize interference between fractures and wherein the plurality of fractures enhances the production of gas from the coal seam of the subterranean formation, and

performing an additional fracturing subsequent to the step of fracturing the coal seam using the hydrajetting tool along the plurality of substantially horizontal well bores.

21. (Original) The method of claim 20, further comprising the step of perforating the casing with the hydrajetting tool.

22. (Previously Presented) The method of claim 20, further comprising the step of removing water from the coal seam of the subterranean formation.

23. (Original) The method of claim 20, wherein during the fracturing steps the hydrajetting tool produces a plurality of pairs of opposed bi-wing fractures.

24 - 28. (Cancelled)

29. (New) The method of claim 1 comprising performing an additional fracturing step using the hydrajetting tool subsequent to the step of fracturing the coal seam using the hydrajetting tool.

30. (New) The method of claim 8 comprising performing an additional fracturing step using the hydrajetting tool subsequent to the step of fracturing the coal seam along the substantially horizontal well bore.

31. (New) The method of claim 15 comprising performing an additional fracturing step using the hydrajetting tool subsequent to the step of fracturing the coal seam using the hydrajetting tool.

32. (New) The method of claim 20 comprising performing an additional fracturing step using the hydrajetting tool subsequent to the step of fracturing the coal seam along the plurality of substantially horizontal well bores.

33. (New) The method of claim 1 wherein the step of fracturing the coal seam using a hydrajetting tool comprises discharging from the hydrajetting tool a fluid comprising proppant particulates.

34. (New) The method of claim 8 wherein the step of fracturing the coal seam along the substantially vertical well bore using a hydrajetting tool comprises discharging from the hydrajetting tool a fluid comprising proppant particulates.

35. (New) The method of claim 15 wherein the step of fracturing the coal seam using a hydrajetting tool comprises discharging from the hydrajetting tool a fluid comprising proppant particulates.

36. (New) The method of claim 20 wherein the step of fracturing the coal seam along the substantially vertical well bore using a hydrajetting tool comprises discharging from the hydrajetting tool a fluid comprising proppant particulates.